

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims:

1. (Currently Amended) A processor-implemented method of encrypting an original string, comprising:
 - selectively defining a set of factors that represents factors to be used for encrypting the original string;
 - defining an encryption equation that ~~transforms~~ maps the original string to an encrypted string ~~and that generates corresponding derivatives;~~
 - selectively defining a set of derivatives relating to the factors, wherein the set of derivatives contains a plurality of false derivatives that are not used to decrypt the encrypted string;
 - selectively defining a set of derivative equations that represents relationships between the factors and the derivatives to introduce a predetermined degree of randomness in encrypting the original string;
 - determining a decryption equation that maps the derivatives to the factors; and
 - encrypting decrypting the original string using the derivative equations and the factors; and
 - presenting the decrypting original string for processing.
2. (Currently Amended) The method of claim 1, wherein the set of factors comprises ~~any one or more~~ at least one of: constant values, numbers, objects,

and random values that are derived from events.

3. (Currently Amended) The method of claim 1, wherein the set of factors comprises ~~any one or more~~ at least one of: constant values, numbers, objects, and random values that are derived from values provided by equations.

4. (Original) The method of claim 1, wherein the derivative equations comprise mathematical functions that are defined in terms of the factors.

5. (Original) The method of claim 1, wherein the number of the derivative equations is at least equal to the number of the factors.

6. (Original) The method of claim 1, wherein the original string is comprised of characters.

7. (Canceled)

8. (Currently Amended) The method of claim 1, further comprising determining a plurality of factor decryption equations that map ~~for mapping~~ the derivatives to a plurality of mapped factors.

9. (Original) The method of claim 8, further comprising determining a decryption equation as a mathematical function of an encrypted string in the encrypted string and the plurality of mapped factors.

10. (Original) The method of claim 9, further comprising storing the encrypted string in a database with a set of stored derivatives.

11. (Canceled)

12. (Original) The method of claim 1, further comprising decrypting the encrypted string based on the derivatives and the derivative equations.

13. (Original) The method of claim 1, wherein selectively defining the set of factors comprises defining at least one factor.

14. (Original) The method of claim 1, wherein selectively defining the set of derivative equations comprises defining at least one derivative equation.

15. (Currently Amended) A processor-implemented system for encrypting and decrypting an original string, comprising:

an ~~implementor~~ implementer selectively defines a set of factors that represents factors to be used for encrypting the original string;

~~the implementor further defines an encryption module defining an encryption equation that transforms maps~~ the original string to an encrypted string ~~and that generates corresponding derivatives;~~

the encryption module selectively defining a set of derivatives relating to the factors, wherein the set of stored derivatives contains a plurality of false derivatives that are not used to decrypt the encrypted string;

the ~~implementor~~ implementer further selectively defining defines a set of derivative equations that represents relationships between the factors and the derivatives to introduce a predetermined degree of randomness in encrypting the original string;

the implementer further determining a decryption equation that maps

the derivatives to the factors; and

~~an encryption~~ a decryption module ~~encrypts~~ decrypts the original string using the derivative equations and the factors, and for presenting the decrypting original string for processing.

16. (Currently Amended) The system of claim 15, wherein the set of factors comprises ~~any one or more~~ at least one of: constant values, numbers, objects, and random values that are derived from events.

17. (Currently Amended) The system of claim 15, wherein the set of factors comprises ~~any one or more~~ at least one of: constant values, numbers, objects, and random values that are derived from values provided by equations.

18. (Currently Amended) A computer program product having a plurality of executable instruction codes stored on a computer readable storage medium, for encrypting and decrypting an original string, comprising:

a ~~first~~ set of instruction codes that represents factors to be used for encrypting the original string;

a ~~second~~ set of instruction codes that defines an encryption equation for transforming the original string to an encrypted string ~~and for generating corresponding derivatives;~~

a set of instruction codes that defines a set of derivatives relating to the factors, wherein the set of stored derivatives contains a plurality of false derivatives that are not used to decrypt the encrypted string;

a ~~third~~ set of instruction codes that defines a set of derivative equations representing relationships between the factors and the derivatives and that introduce a predetermined degree of randomness in encrypting the original

string; and

a fourth set of instruction codes for ~~encrypting~~ decrypting the original string using the derivative equations and the factors; and

a set of instruction codes for presenting the decrypting original string for processing

19. (Currently Amended) The computer program product of claim 18, wherein the set of factors comprises ~~any one or more~~ at least one of: constant values, numbers, objects, and random values that are derived from events.

20. (Currently Amended) The computer program product of claim 18, wherein the set of factors comprises ~~any one or more~~ at least one of: constant values, numbers, objects, and random values that are derived from values provided by equations.